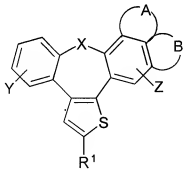
In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A method of treating a disease, damage, or disorder of the central nervous system caused by a disorder of neurochemical equilibrium of biogenic amines or other neurotransmitters in a human in need thereof, said method comprising administering a therapeutically effective amount of a ~~Use of the~~ compounds of the general formula I



I

wherein

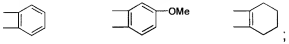
X means CH_2 or a heteroatom selected from the group consisting of O, S, S(=O), $S(=O)_2$, and NR^a, wherein R^a is hydrogen or a substituent selected from the group consisting of C_1-C_3-alkyl, C_1-C_3-alkanoyl, C_1-C_7-alkyloxycarbonyl, C_7-C_{10}-arylalkyloxycarbonyl, C_7-C_{10}-aroyl, C_7-C_{10}-arylalkyl, C_3-C_7-alkylsilyl, C_5-C_{10}-alkylsilylalkyloxyalkyl;

Y and Z independently from each other mean one or more identical or different substituents linked to any available carbon atom selected from the group consisting of hydrogen, halogen, C_1-C_4-alkyl, C_2-C_4-alkenyl, C_2-C_4-alkinyl, trifluoromethyl, halo-C_1-C_4-alkyl, hydroxy, C_1-C_4-alkoxy, trifluoromethoxy, C_1-C_4-alkanoyl, amino, amino-C_1-C_4-alkyl, C_1-C_4-alkylamino, *N*-(C_1-C_4-alkyl)amino, *N,N*-di(C_1-C_4-alkyl)amino, thiol, C_1-C_4-alkylthio, C_1-C_4-alkylsulfonyl, C_1-C_4-alkylsulfinyl, carboxy, C_1-C_4-alkoxycarbonyl, nitro;

G_A

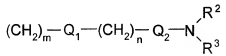
G_B

wherein G_A or G_B have a meaning of structures



;

R^1 means CH_2OH, optionally substituted C_1-C_7-alkyl C_1-C_7-alkyloxycarbonyl or a substituent of the formula **II:**



II

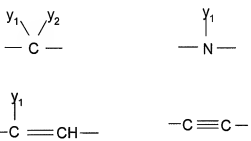
wherein

R^2 and R^3 simultaneously or independently from each other represents hydrogen, C_1-C_4-alkyl, aryl or together with N have the meaning of optionally substituted heterocycle or heteroaryl;

n represents an integer from 0 to 3;

m represents an integer from 1 to 3;

Q_1 and Q_2 independently from each other have the meaning of oxygen, sulfur or a group:



wherein substituents

y_1 and y_2 independently from each other have the meaning of hydrogen, halogen, optionally substituted C_1-C_4-alkyl or aryl, hydroxy, C_1-C_4-alkoxy, C_1-C_4-alkanoyl, thiol, C_1-C_4-alkylthio, C_1-C_4-alkylsulfonyl, C_1-C_4-alkylsulfinyl, nitro, or together form a carbonyl or imino group;

wherein for all substituents mentioned before an optionally substituted alkyl group is an alkyl group with one, two, three or more substituents which are halogen atom, hydroxy, C_1-C_4 alkoxy, thiol, C_1-C_4 alkylthio, amino, *N*-(C_1-C_4) alkylamino, *N,N*-di(C_1-C_4-alkyl)-amino, sulfonyl, C_1-C_4 alkylsulfonyl, sulfinyl, C_1-C_4 alkylsulfinyl; wherein aryl has the meaning of an aromatic ring as well as fused aromatic rings containing one ring with at least 6 carbon atoms or two rings with totally 10 carbon atoms and with alternating double bonds between carbon atoms; wherein a heteroaryl is a group which is an aromatic or partially aromatic group of a monocyclic or bicyclic ring with 4 to 12 carbon atoms, at least one of them being a hetero atom such as O, S or N, and the available nitrogen atom or carbon atom is the binding site of the group to the rest of the molecule either via a direct bond or via a C_1-C_4 alkylene group, wherein a heterocycle is a five-membere or six-member, fully saturated or partly unsaturated heterocyclic groups containing at least one hetero atom such as O, S or N, and the available nitrogen atom or carbon atom is the binding site of the group to the rest of the molecule either via a direct bond or via a C_1-C_4 alkylene group and wherein an optionally substituted aryl, heteroaryl or heterocycle is an aryl, heteroaryl or heterocycle group which is substituted with one or two substituent which are halogen, C_1-C_4 alkyl, cyano, nitro, hydroxy, C_1-C_4 alkoxy, thiol, C_1-C_4 alkylthio, amino, *N*-(C_1-C_4) alkylamino, *N,N*-di(C_1-C_4-alkyl)-amino, sulfonyl, C_1-C_4 alkylsulfonyl, sulfinyl, C_1-C_4 alkylsulfinyl;

and of their pharmaceutically acceptable salts and solvates ~~for the manufacture of pharmaceutical formulations for the treatment and prevention of diseases, damages and disorders of the central nervous system caused by disorders of neurochemical equilibrium of biogenic amines or other neurotransmitters~~.

2. (Currently Amended) The method ~~Use~~ according to claim 1, wherein the selected biogenic amines are serotonin, norepinephrine and dopamine.

3. (Currently Amended) The method ~~Use~~ according to claim 1, wherein neurotransmitter is glutamate.

4. (Currently Amended) The method ~~Use~~ according to claim 1 wherein the compounds of the general formula **I** act upon the neurochemical equilibrium by regulating the synthesis, storing, releasing, metabolizing and/or reabsorption of biogenic amines or neurotransmitters and binding to their receptors.

5. (Currently Amended) The method ~~Use~~ according to claim 4, wherein the compounds of the general formula **I** show binding affinity to a receptor of one or more biogenic amines.

6. (Currently Amended) The method ~~Use~~ according to claim 5, wherein the compounds of the general formula **I** show significant binding affinity to serotonin 5-HT_{2A} and 5-HT_{2C} receptors.

7. (Currently Amended) The method ~~Use~~ according to claim 6, wherein the compounds of the general formula **I** show binding affinity to selected serotonin receptors in a concentration of IC50<1μM.

8. (Currently Amended) The method ~~Use~~ according to claim 1, wherein the compounds of the general formula **I** act as σ1 receptor ligands in a concentration of IC_{50}<1μM by modulating central neurotransmitter system.

9. (Currently Amended) The method ~~Use~~ according to claim 1, wherein the compounds of the general formula **I** show dual binding affinity to σ1 receptor and to at least one serotonin receptor selected from 5-HT_{2A} and 5-HT_{2C}.

10. (Currently Amended) The method ~~Use~~ according to claim 1, wherein the diseases and disorders of the central nervous system are selected from the group consisting of anxiety, depression and modest depression, bipolar disorders, sleeping disorders, sexual disorders, psychosis, borderline psychosis, schizophrenia, migraine, personality disorders and obsessive-compulsive disorders, social phobia or panic attacks, organic mental disorders in children, aggression, memory disorders and personality disorders in elderly people, addiction, obesity, bulimia and similar disorders, snoring, premenstrual troubles.

11. (Currently Amended) The method ~~Use~~ according to claim 1, wherein the damages of the central nervous system are caused by trauma, brain stroke, neurodegenerative diseases, cardiovascular disorders such as high blood pressure, thrombosis, infarct as well as by gastrointestinal disorders.

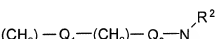
12. (Currently Amended) The method ~~Use~~ according to claim 1 wherein X represents O, S, or NR^a, wherein R^a is hydrogen or substituent selected from

the group consisting of C_1-C_3-alkyl, C_1-C_3-alkanoyl, C_1-C_7-alkoxycarbonyl, C_7-C_{10}-aroyl and C_7-C_{10}-arylalkyl.

13. (Currently Amended) The method ~~Use~~ according to claim 1 wherein Y and Z independently from each other mean one or more identical or different substituents linked to any available carbon atom selected from the group consisting of hydrogen, fluorine, chlorine, bromine, C_1-C_4-alkyl, halo-C_1-C_4-alkyl, hydroxy, C_1-C_4-alkoxy, trifluoromethoxy, C_1-C_4-alkanoyl, amino, amino-C_1-C_4-alkyl, *N*-(C_1-C_4-alkyl)amino, *N,N*-di(C_1-C_4-alkyl)amino, thiol, C_1-C_4-alkylthio, cyano and nitro.

14. (Currently Amended) The method ~~Use~~ according to claim 1 wherein R^1 has the meaning of CH_2OH, optionally substituted C_1-C_7-alkyl C_1-C_7-alkyloxycarbonyl

or a substituent of the formula **II**:



II

wherein

R^2 and R^3 simultaneously or independently from each other represent hydrogen, C_1-C_4-alkyl, aryl wherein ary has the meaning as defined above; or together with N have the meaning of heterocycle or heteroaryl selected from the group consisting of morpholine-4-yl, piperidine-1-yl, pyrrolidine-1-yl, imidazole-1-yl and piperazine-1-yl;

m represents an integer from 1 to 3;

n represents an integer from 0 to 3;

Q_1 and Q_2 independently from each other have the meaning of oxygen or CH_2 group.

15. (Currently Amended) The method ~~Use~~ according to claim 1, wherein the compounds of the general formula I, pharmaceutically acceptable salts and solvates thereof are selected from the group consisting of:

8-Oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulene-2-carboxylic acid ethyl ester;*

1,8-Dithia-benzo[e]*naphtho*[3,2-h]*azulene-2-carboxylic acid ethyl ester;*

3,10-Dithia-benzo[e]*naphtho*[1,2-h]*azulene-2-carboxylic acid ethyl ester;*

10-Oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulene-2-carboxylic acid ethyl ester;*

11-Methoxy-8-oxa-1-thia- benzo[e]*naphtho*[3,2-h]*azulene-2-carboxylic acid ethyl ester;*

6,7,8,9-Tetrahydro-10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulene-2-carboxylic acid ethyl ester;*

10,11,12,13-Tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulene-2-carboxylic acid ethyl ester;*

(8-Oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-yl)-methanol;*

(1,8-Dithia-benzo[e]*naphtho*[3,2-h]*azulen-2-yl)-methanol;*

(3,10-Dithia-benzo[e]*naphtho*[1,2-h]*azulen-2-yl)-methanol;*

(10-Oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-yl)-methanol;*

(11-Methoxy-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-yl)-methanol;*

(6,7,8,9-Tetrahydro-10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-yl)-methanol;*

(10,11,12,13-Tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-yl)-methanol;*

Dimethyl-[2-(8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-ethyl]-amine;*

Dimethyl-[3-(8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

3-(8-Oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-propylamine;*

Dimethyl-[3-(1,8-dithia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

Dimethyl-[2-(3,10-dithia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-ethyl]-amine;*

Dimethyl-[3-(3,10-dithia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

Dimethyl-[2-(10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-ethyl]-amine;*

Dimethyl-[3-(10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

Dimethyl-[3-(11-methoxy-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

Dimethyl-[2-(6,7,8,9-tetrahydro-10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-ethyl]-amine;*

Dimethyl-[3-(6,7,8,9-tetrahydro-10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

3-(6,7,8,9-Tetrahydro-10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-propylamine;*

Methyl-[3-(6,7,8,9-tetrahydro-10-oxa-3-thia-benzo[e]*naphtho*[1,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

Dimethyl-[2-(10,11,12,13-tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-ethyl]-amine;*

Dimethyl-[3-(10,11,12,13-tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

4-[2-(10,11,12,13-Tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-ethyl]-morpholine;*

1-[2-(10,11,12,13-Tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-ethyl]-piperidine;*

1-[2-(10,11,12,13-Tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-ethyl]-pyrrolidine;*

Dimethyl-[2-(10,11,12,13-tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-propyl]-amine;*

Dimethyl-[1-methyl-(10,11,12,13-tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethoxy)-ethyl]-amine;*

11-Hydroxy-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulene-2-carboxylic acid ethyl ester;*

11-(2-Dimethylamino-ethoxy)-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulene-2-carboxylic acid ethyl ester;*

11-(3-Dimethylamino-propoxy)-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulene-2-carboxylic acid ethyl ester;* and

Dimethyl-(10,11,12,13-tetrahydro-8-oxa-1-thia-benzo[e]*naphtho*[3,2-h]*azulen-2-ylmethyl)amine.*